

Rec'd PCT/PTO 28 DEC 2004
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INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

REC'D 07 OCT 2004

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Applicant's or agent's file reference 203752/EP/pr		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/EP 02/07540	International filing date (day/month/year) 04.07.2002	Priority date (day/month/year) 04.07.2002	
International Patent Classification (IPC) or both national classification and IPC H04L12/58			
Applicant TELEFONAKTIEBOLAGET L M ERICSSON (PUBL) et al			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 6 sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>			
Date of submission of the demand 28.01.2004		Date of completion of this report 06.10.2004	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer Forster, G Telephone No. +49 89 2399-8986	



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/EP 02/07540

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

2-4, 6-14 as originally filed
1, 1a, 5 received on 20.09.2004 with letter of 17.09.2004

Claims, Numbers

1-14 received on 20.09.2004 with letter of 17.09.2004

Drawings, Sheets

1/4-4/4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/EP 02/07540**

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-14
	No: Claims	
Inventive step (IS)	Yes: Claims	1-14
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-14
	No: Claims	

2. Citations and explanations

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP 02/07540

to section V.

1. The present invention relates to a method of delivering a message to a target access device using at least one telecommunications network and to an arrangement for delivering a message, according to the features of the amended independent claims 1 and 8 respectively.
2. The closest prior art document is considered to be document WO-A-01 69387 (first document cited in the international search report) and is acknowledged in the opening part of the description.
3. According to the features of the two independent claims the inventive step consists in that the selecting of a target access device is further based on an analysis of operational capabilities of the user access devices in dependence of the message content, and wherein said message is delivered at said selected target access device by converting at least a part of said message content to a format which is dependent on said selected target access device.

The underlying concept is not disclosed in or rendered obvious by the cited prior art documents. The subject-matter of the independent claims thus fulfils the requirements of Article 33 PCT.

4. The dependent claims contain further details on the subject-matter of the respective independent claims. These dependent claims merely limit the scope of protection sought by the independent claims and are therefore also considered to fulfil the requirements of Article 33 PCT.

Title

Method and arrangement for providing a messaging service

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Field of the Invention

The present invention relates to a method of delivering telecommunications services, wherein a user has access to a plurality of services, such as digital cable television services, telematic services, Plain Old Telephone Services (POTS) or Internet-Protocol-based (IP) services, which services are provided to the user via at least one network and are accessed by the user using one or more access devices, such as a UMTS phone or a TV set-top box, characterized in that any of the plurality of services is delivered to the user based on result of performing use-analysis of any of the services and the access devices.

The present invention further relates to an arrangement for delivering telecommunications services, comprising means for providing access to a plurality of services via at least one network and via one or more access devices, characterized in that the arrangement further comprises means for performing use-analysis of any of the services and the access devices, and means for delivering any of the plurality of services to the user based on result of the performed use-analysis of any of the services and the access devices.

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Background of the Invention

In modern telecommunications most users are subscribed to a number of different telecommunication services, enabling these users to use modern communication techniques wherever they are and whenever they desire.

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A user may have plain old telephone services (POTS) and/or

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ART 34 AMDT

Summary of the Invention

It is an object of the present invention to provide a method of and an arrangement for providing telecommunications services, offering extended reachability to the users of these services.

It is an additional object of the present invention to provide a method and an arrangement that is simple and easy to implement, thus reducing cost of production and providing extended compatibility.

These and other objects and advantages of the present invention are provided by a method of delivering telecommunications services, wherein a user has access to a plurality of services, such as digital cable television services, telematic services, Plain Old Telephone Services (POTS) or Internet-Protocol-based (IP) services, which services are provided to the user via at least one network and are accessed by the user using one or more access devices, such as a UMTS phone or a TV set-top box, characterized in that any of the plurality of services is delivered to the user based on result of performing use-analysis of any of the services and the access devices.

With the convergence of networks, the opportunity exists to deploy telecommunications services independent of the subscriber's access device and independent of the originating- and destination network the device is connected to. Such functionality can be enabled by a method for providing telecommunications services which is deployed in between telecom's networks, and which is flexible enough to handle all sorts of incoming events and re-trigger them on any device the subscriber uses frequently and is switched on. Examples of such events can be voice or data calls, message-related signalling events, the receiving of e-mail, etcetera.

In an embodiment of the present invention, the handling and re-triggering is done based on result of performing use-analysis of any of the services and the access devices. This use analysis may, for

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Claims

1. Method of delivering telecommunications services, wherein a user has access to a plurality of services, such as digital cable television services, telematic services, Plain Old Telephone Services (POTS) or Internet-Protocol-based (IP) services, which services are provided to the user via at least one network and are accessed by the user using one or more access devices, such as a UMTS phone or a TV set-top box, characterized in that any of said plurality of services is delivered to said user based on result of performing use-analysis of any of said services and said access devices.

2. Method according to claim 1, wherein operation of a service invokes at least one service-related event, and wherein said at least one service-related event is used as an input to said use-analysis of any of said services and said access devices.

3. Method according to any of the previous claims, wherein said telecommunications services are comprised of messaging services.

4. Method according to any of the previous claims, wherein a personal identification by said user, such as a personal identification for use of banking services or public transportation, is used as an input to said use-analysis of any of said services and said access devices.

5. Method according to any of the previous claims, further comprising a step of keeping a history of results of said use-analysis of any of said services and said access devices, and wherein delivery of said plurality of services is based on said history.

6. Method according to any of the previous claims, comprising a step of selecting an access device of the user for delivering any of said plurality of services, and wherein said selection depends on an operational mode of any of the access devices of the user.

7. Method according to any of the previous claims, comprising a step of selecting an access device of the user for delivering any of

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said plurality of services, and wherein said selection depends on operational capabilities of any of the access devices of the user.

8. Method according to any of the previous claims, wherein delivering any of said plurality of services further depends on preferences of the user for receiving any of said plurality of services.

9. Method according to any of the previous claims, comprising a step of selecting an access device of the user for delivering any of said plurality of services, wherein at least some of said access devices are of a different type, and wherein a format for delivering said services depends on the type of access device for receiving said services.

10. Method according to any of the previous claims, wherein delivering any of said plurality of services comprises a step of triggering off a message to at least one of said access devices of said user.

11. Method according to any of the previous claims, wherein delivering any of said plurality of services comprises a step of conversion of data into a format selected for delivering said services.

12. Method according to any of the previous claims 2-11, wherein said service-related event comprises service-related content, wherein any of said plurality of services delivered comprises delivering a notification message to said user based on result of performing use-analysis of any of said services and said access devices, said notification message comprising at least part of said content.

13. Arrangement for delivering telecommunications services, comprising means for providing access to a plurality of services via at least one network and via one or more access devices, characterized in that said arrangement further comprises means for performing use-analysis of any of said services and said access devices, and means for delivering any of said plurality of services to said user based on result of said performed use-analysis of any of said services and said access devices.

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14. Arrangement according to claim 13, further comprising means for receiving service related events, means for interpreting these service related events, and means for using said events as an input to said use-analysis of any of said services and said access devices.

5 15. Arrangement according to any of the claims 13 and 14, further comprising a database of historic data regarding results of said use-analysis of any of said services and said access devices, and means for storing information regarding said results in said database.

10 16. Arrangement according to any of the claims 13-15, further comprising means for selecting an access device for delivering a service based on result of said performed use-analysis of any of said services and said access devices and at least one of a group comprising an operational mode of any of the access devices, operational capabilities of any of the access devices, and user preferences.

15 17. Arrangement according to any of the claims 13-16, comprising means for converting data into a format that corresponds to any of a service to be delivered to the user and a specific access device.

20 18. Arrangement according to any of the claims 13-17, wherein said means for delivering any of said plurality of services comprises means for triggering off a message to at least one of said access devices of said user.

25 19. Arrangement according to any of the claims 13-18, further comprising means for providing an indication of a user's whereabouts based on result of said use-analysis of any of said services and said access devices.

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